

**Establishment of a Scientific Review Panel
for the CALFED Ecosystem Restoration Program Plan (ERPP)
April 30, 1997**

I. Introduction

The CALFED Bay-Delta Program intends to convene a scientific review panel in July 1997 with the objective of bringing forth the best available scientific expertise to evaluate the Ecosystem Restoration Program Plan (ERPP). This effort responds to requests by various stakeholders and the BDAC Ecosystem Restoration Work Group to convene an independent scientific review of the ERPP.

CALFED staff first outlined this conceptual proposal to the BDAC Ecosystem Restoration Work Group at its March 25 meeting. We are presenting this proposal to expand upon and clarify our earlier memorandum and to solicit public input regarding the structure of the process, the criteria for selection of panel members and the questions to be addressed by the panel and process.

II. Topical Focus of the Scientific Review

The focus of the facilitated review is the entire ERPP, with particular emphasis on the linkages between the logic, methodology, and analysis supporting the Ecosystem Restoration Program Plan (ERPP). This will necessarily require review from the perspectives of multiple disciplines including:

- (1) landscape ecology
- (2) physical processes--hydrology and geomorphology
- (3) aquatic resources
- (4) riparian and terrestrial resources

The focus will be on the underlying hypothesis and the rationale behind the implementation objectives. Additionally, the panel may also provide recommendations on other process type issues.

III. Objectives of the Process and Outcomes Anticipated

The overarching goal is to assess and evaluate the scientific validity and

rationale of the recommendations contained in the ERPP. This will in turn create the dual benefits of building broader support for the ERPP and strengthening the prospects for effective implementation of the program. Some of the specific results anticipated from this review process are:

- Identification of primary areas of scientific agreement and areas of disagreement;
- Assessment and evaluation of the scientific validity and rationale of the underlying hypotheses and implementation objectives embodied in the ERPP;
- Advice on the presentation and structure of ERPP; and
- Recommendations for structuring the future adaptive management strategy.

IV. Overview of the Proposed Structure

Figure 1 illustrates the steps in this proposed facilitated scientific review process. The proposed structure of the scientific review is as follows:

Frame questions to be addressed. In coordination with the BDAC Ecosystem Restoration Work Group, CALFED staff will develop a list of questions and issues for the scientific panel to use during its review. It would be a daunting task to expect scientists unfamiliar with the Bay-Delta system and its unique problems to review the entire document with multiple targets and actions and provide a meaningful review.

Establish a panel of independent scientists who are well qualified to address these questions. A panel of nationally recognized scientists will be selected to address specific questions. It is anticipated that a single panel approach will be used, however, the panel may break into subgroups to address specific topical areas. The panel will be comprised of approximately 10 to 15 scientists with broad expertise in ecosystem restoration or conservation management.

Recruit technical advisors with expertise in the Bay Delta system to assist the panels in their review. A group of technical advisors will be assembled to assist the scientific panel in its review. The technical advisors will include technical experts from the agencies, stakeholders and local universities who have played a significant role in the development of the scientific issues in the Bay-Delta system.

Meet over a period of several days to develop recommendations. Over a 3-4 day period the panel (and subgroups if necessary) would meet and participate in a facilitated scientific review with observation and interaction with interested stakeholders, CALFED staff, and other technical experts. An effort would be made to

document areas of scientific agreement and to establish the basis for remaining areas of disagreement and uncertainty. Figure 2 outlines the sequence of activities envisioned for the fact finding workshop.

Prepare a written report. The panel members will submit a written report with recommendations and a summary of the joint discussions to the Ecosystem Restoration Workgroup for comment and input, to BDAC for discussion and deliberation, and finally to CALFED.

V. Proposed Criteria for Recruitment of Panelists

Panelists should: (1) not be stakeholders or advocates in the CALFED process; (2) have advanced degrees and an established record of research and publication in one of the four resource topics; and (3) have a track record of providing scientific input into public policy.

VI. Sample Questions to be Addressed by the Scientific Panel

CALFED will be developing a list of questions to put before the panels regarding the ERPP. Listed below are a few *examples* of questions that may be asked.

1. An underlying hypothesis of the ERPP is that restoration of regularly reoccurring (2-5 year) flow events will serve to support basic ecological processes and functions in the tributaries to the Delta and in the Delta itself. Is this a valid hypothesis?
2. Even though the ecosystems of the Central Valley and the Bay Delta are highly modified it is an hypothesis of the ERPP that restoration of ecological functions and processes will result in restoration of aquatic and wetland habitats. Is this a valid hypothesis? Will the irreversible changes to the ecosystem/watershed impede attainment of the visions/ implementation objectives?
3. It is an hypothesis of the ERPP that species of special concern will respond at the population level to increases in habitat that are derived from the restoration of ecological processes and functions. Is this a valid hypothesis?

4. It is an hypothesis of the ERPP that partial reduction of stressors in the ecosystem will result in population level responses for species dependent on the Bay-Delta. Is this a valid hypothesis?
5. It is an hypothesis of the ERPP that restoration of ecological processes in the uppermost areas of watersheds of the Bay-Delta will result in measurable benefits in the tributaries to the Delta and the Delta itself. Is this a valid hypothesis?
6. Is the general approach and framework of the ERPP appropriate and adequate? The approach used by the ERPP includes implementation objectives, targets, programmatic actions and visions. Indicators have been identified to track the effectiveness of the implementation objectives.
7. Are the indicators used in the ERPP appropriate? Are there scientific bases for selecting numeric values of indicators? What are the most important indicators of ecosystem health?
8. Are the targets a complete list of the tools that might be needed to achieve the implementation objectives?
9. Will the ERPP create bottlenecks (e.g. massive restoration of rearing habitat with insufficient restoration of spawning habitat)?
10. Are the proposed programmatic actions integrated across the landscape (e.g. are actions mutually reinforcing or at odds with one another)?
11. For the programmatic actions where scientific certainty of the benefits is not known what are the appropriate actions needed to reduce the uncertainty?
12. Does the Implementation Plan of the ERPP identify the highest priority programmatic actions for near-term implementation?

VII. Opportunities for Stakeholder Involvement in the Facilitated Scientific Review Process

Stakeholders will have opportunities to review, comment on, and contribute to the proposed facilitated scientific review process. They are as follows:

- review and discussion of the proposed approach at BDAC Ecosystem Work Group meetings;
- opportunity to submit draft questions for scientific panel deliberation;
- opportunity to comment on criteria for panel recruitment;
- opportunity to nominate prospective panelists;
- participation in question and answer sessions of the facilitated workshop, together with the opportunity to observe panel deliberations;
- review and discussion of draft panel report at BDAC Ecosystem Work Group meetings;
- Comments from stakeholders will be included in the final panel report.

VIII. Proposed Time Line

The timeline must be keyed to both the release of the ERPP itself and to the necessary lead time to recruit panelists and enable them to prepare effectively for the facilitated workshop. Final preparation steps for the facilitated scientific review will be accomplished in the next four to six weeks, including recruitment of panelists.

The ERPP is slated to be released on June 16. As soon as the document is available, a packet will be assembled to initiate the panel deliberations. The panel will then meet in July 1997. A draft report from the panel, together with a summary of the plenary discussions, would be submitted to the BDAC Ecosystem Work Group in late July or August.

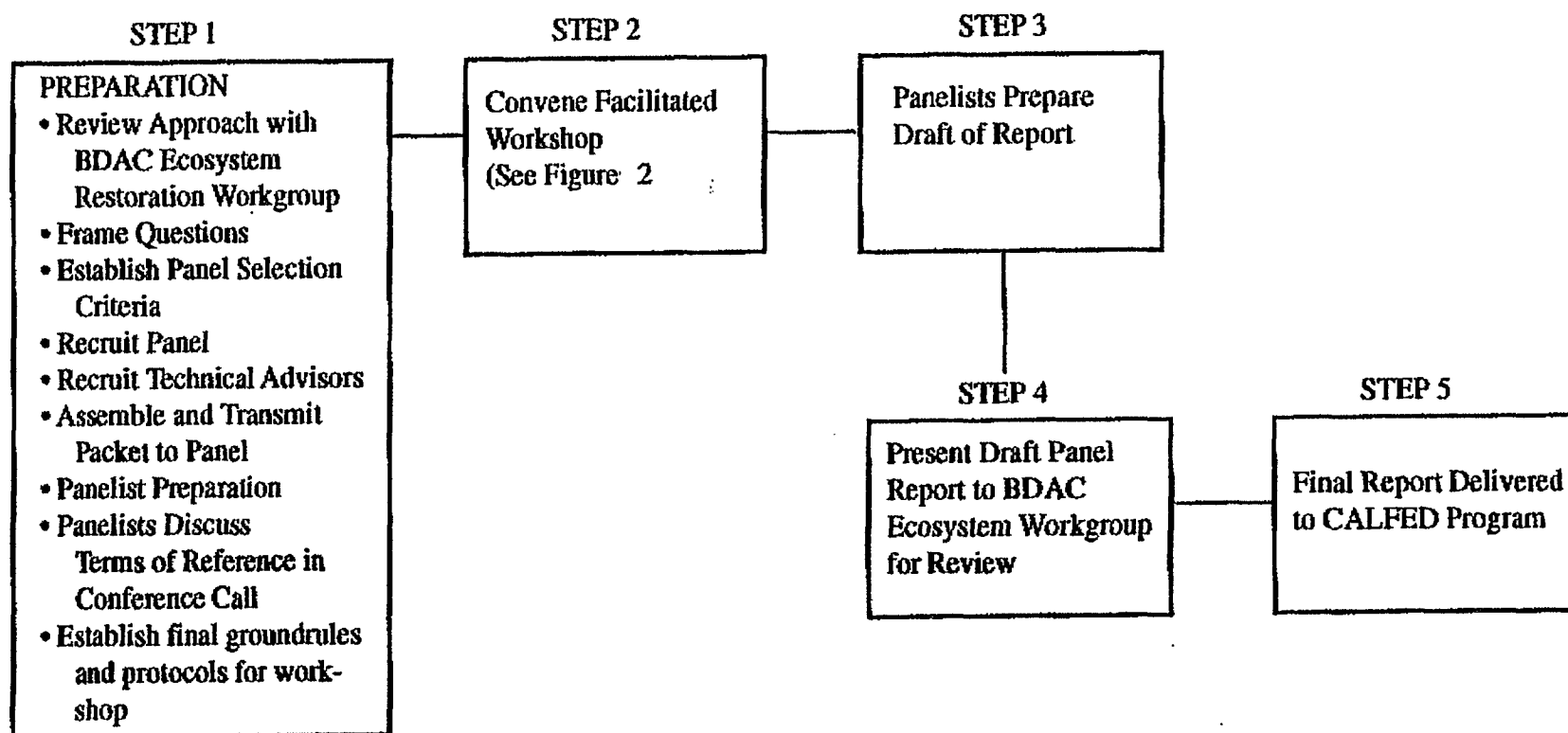
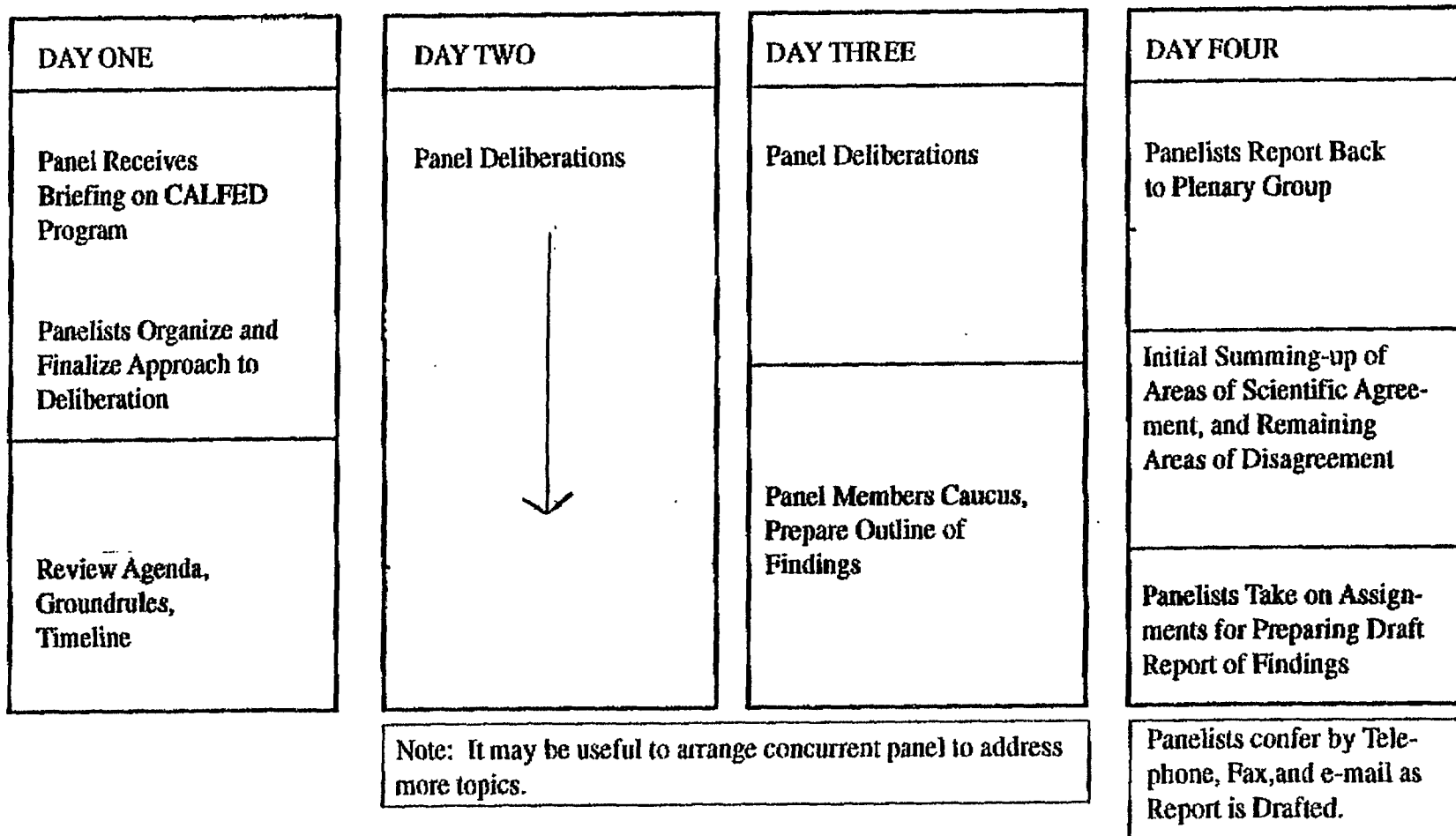
FIGURE 1: FACILITATED SCIENTIFIC REVIEW OF THE ERPP

FIGURE 2: DRAFT FORMAT OF THE 4-DAY WORKSHOP

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FIGURE 2
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